Abstract

An equatorial tracking platform for a telescope that comprises two rolling surfaces, each in contact with a pair of rollers which each have an adjustment for the latitude setting. One rolling surface is a complex 3-dimensional contour, which provides for a differing radius for each latitude setting, while the other rolling surface is of fixed radius. By varying the angle of the roller pairs, the virtual axis of rotation is changed to be aligned parallel to the earth's rotational axis, thus allowing a telescope to accurately track a celestial object.